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### ***Mission of the Maritime Administration***

*To strengthen the U.S. maritime transportation system--including infrastructure, industry, and labor--to meet the economic and security needs of the Nation.*



# INDUSTRY OVERVIEW

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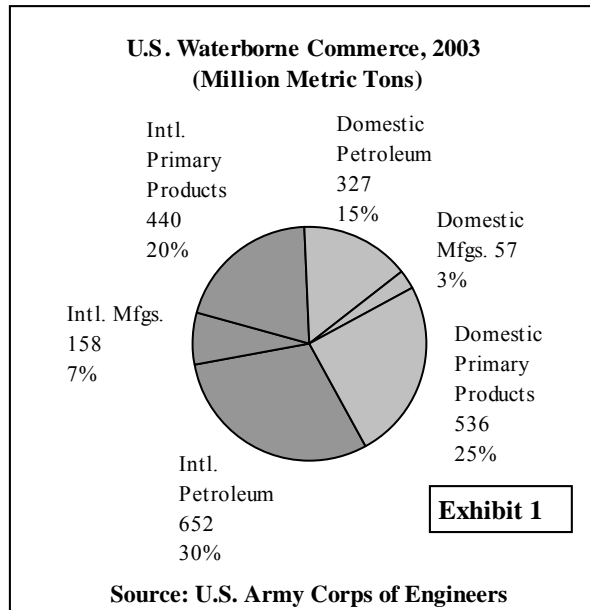
*A kingdom, that has a large import and export, must abound more with industry, and that employed upon delicacies and luxuries, than a kingdom that rests contented with its native commodities. It is, therefore, more powerful as well as richer and happier.*

David Hume, "Essay of Commerce," 1752

In the past, U.S. manufacturers and retailers had generous on-site warehouse capacity to provide for market uncertainty. Today, industries rely on sophisticated supply-chain logistics and just-in-time delivery practices to compete globally. Business plans are designed accordingly, with little or no room for delay, using minimum storage space.



The United States is the world's greatest trading Nation, accounting for nearly 20 percent of the world's annual oceanborne trade. U.S. international trade amounts to \$2 trillion annually. Half of this trade consists of manufactured goods carried in shipping containers, and more than seven million containers enter American ports every year. The U.S. marine transportation industry serves the needs of both foreign and domestic commerce. It comprises companies that carry freight or passengers on the open seas or inland waterways, offer towing services, charter vessels, operate canals and terminals, and develop offshore oil resources. In 2002, almost 27 percent of the Nation's Gross Domestic Product (GDP) was dependent on international trade, 38 percent of the value, and 78 percent of the volume of which moves by water.



Thus, America's continued economic health depends on the current and future efficiency of the marine transportation industry.

In 2003, U.S. waterborne commerce amounted to 2.2 billion metric tons (Exhibit 1). This includes inland waterway commerce. International commerce accounted for 58 percent of the total, up from 52 percent 5 years earlier. The increase is due largely to a 20 percent increase in petroleum imports, and a 9 percent decline in coastwise petroleum shipments. The increasing share of imports in U.S. waterborne commerce has contributed to a rising deficit in the U.S. international ocean freight accounts (Exhibit 2). The growth of freight payments (to foreign companies) in absolute terms has been about twice the growth in payments to U.S. companies (gross output).

Petroleum and other primary commodities (coal, chemicals, crude materials, and farm products) accounted for 90 percent of U.S. waterborne commerce. Manufactures trades, a category including manufactured equipment, machinery, and products, and primary manufactured goods, accounted for only 10 percent of U.S. waterborne commerce in 2002, but have doubled over the last 10 years. Imports accounted for virtually all of the increase.

A total of 48,173 U.S.- and foreign-flag vessels were active in U.S. domestic and international trades in 2003; of these, 6,157 were oceangoing vessels (10,000+ DWT). Of the oceangoing vessels, 514 were owned by U.S. companies; of these, 244, fewer than half, were registered under the U.S. flag. In 2003, the U.S.-flag oceangoing fleet carried only 2 percent of U.S. international trade. In addition to the oceangoing

<b>U.S. Marine Transportation, Economic Indicators</b>						
	1998	1999	2000	2001	2002	2003
<b>Gross Output and Components (\$Mil.)</b>						
Gross Output	25,034	27,019	28,864	28,299	27,919	30,037
Intermediate Inputs	18,519	20,606	21,642	20,996	21,004	22,480
Value Added <sup>1</sup>	6,516	6,413	7,222	7,303	6,915	7,557
Employee Compensation	3,077	3,359	3,455	3,578	3,650	3,760
Net Taxes	464	504	481	364	164	366
Operating Earnings (Surplus)	2,975	2,551	3,286	3,361	3,101	3,431
<b>Labor and Capital</b>						
Employment	52,000	54,000	55,000	54,000	54,000	54,000
Capital Stock (\$Mil.)	47,600	47,000	46,600	45,900	45,900	46,100
Return on Capital (%) <sup>2</sup>	6.2	5.4	7.1	7.3	6.8	7.4
<b>International Freight (\$Mil.)</b>						
Receipts	3,783	3,940	4,290	3,771	3,724	4,465
Payments	13,652	15,728	20,068	19,395	18,622	24,174
Balance	(9,869)	(11,788)	(15,778)	(15,624)	(14,898)	(19,709)
<b>U.S. Waterborne Commerce (Mil. Metric Tons)</b>						
International	1,130	1,144	1,228	1,225	1,197	1,248
Imports	763	781	852	863	847	912
Petroleum	501	512	558	563	553	600
Exports	367	363	376	362	349	337
Domestic	992	963	971	945	926	920
Ocean	227	208	206	202	196	201
Petroleum	161	147	148	149	140	146
Other	765	755	765	743	730	719
Total	2,122	2,107	2,199	2,170	2,123	2,168
<b>Vessel Earnings (\$/day)</b>						
Tanker	16,630	12,261	27,206	27,963	16,362	29,351
Dry Bulk	6,309	6,328	9,334	7,924	7,284	9,900
Containership (2,750 TEU)	16,450	15,475	22,188	16,771	10,700	22,125

<sup>1</sup> Gross output less intermediate inputs.

<sup>2</sup> Operating surplus divided by capital stock.

Source: Bureau of Economic Analysis; Clarkson Research Studies for vessel earnings.  
U.S. Army Corps of Engineers for Waterborne Commerce.

Exhibit 2

fleets, there were 216 bulk vessels, of which 47 were U.S.-flag active in U.S. Great Lakes trades. The U.S. domestic fleet contains about 41,800 smaller U.S.-flag vessels: tugs, barges, offshore supply vessels, and ferries are active in U.S. inland and coastal trades.

As of year-end 2003, the value of the U.S.-owned fleet (capital stock) was about \$46 billion with an average age of 17 years. The capital stock declined slightly over the last five years, while industry employment has remained stable at 54,000 since 1999 (Exhibit 2).

Average fleet age is likely to fall over the next five years with the attrition and/or replacement of 25+- year-old vessels. U.S. companies have ordered a significant number of new vessels from foreign and domestic shipyards. These include: ten (four foreign-built) double-hull crude carriers; 15 foreign-built double-hull product carriers; 14 U.S.-built double-hull ATB's (articulated tug/tank barge units), which will replace older barges and product tankers in U.S. coastal trades; 13 foreign-built bulk carriers; six U.S.-built high-speed ferries for U.S. domestic trades, and 54 (17 foreign-built) offshore service vessels. All of the foreign-built vessels will be registered under foreign flags, and all of the U.S.-built vessels will be registered under U.S. flag.

As of year-end 2003, 61 percent (190 vessels) of the U.S.-owned tanker fleet were equipped with double hulls. Even if there were to be no growth in the U.S.-owned tanker fleet, but only the expected replacement of existing single-hull vessels, 67 percent of the U.S.-owned tanker fleet will have double hulls by year-end 2006.

Investments in new vessels are being driven by customer needs and many are tied to long-term customer commitments. Such arrangements integrate marine transportation into production and distribution processes, improve service to customers, stabilize carriers' earnings, and offer the prospect of better returns. Over the last five years, the return on capital for marine transportation services (5.4-7.4 percent) has been below

the return for other U.S. transportation services (8.3-11.9 percent).

The historical volatility in marine transportation operating earnings (surplus) can be traced largely to the impact of changes in oil prices on the demand for tank vessel services (Exhibits 2 and 3). As prices fell in 2000, 2001, and 2003, oil companies rebuilt depleted stocks, contributing to an upturn in petroleum trades, tank-vessel

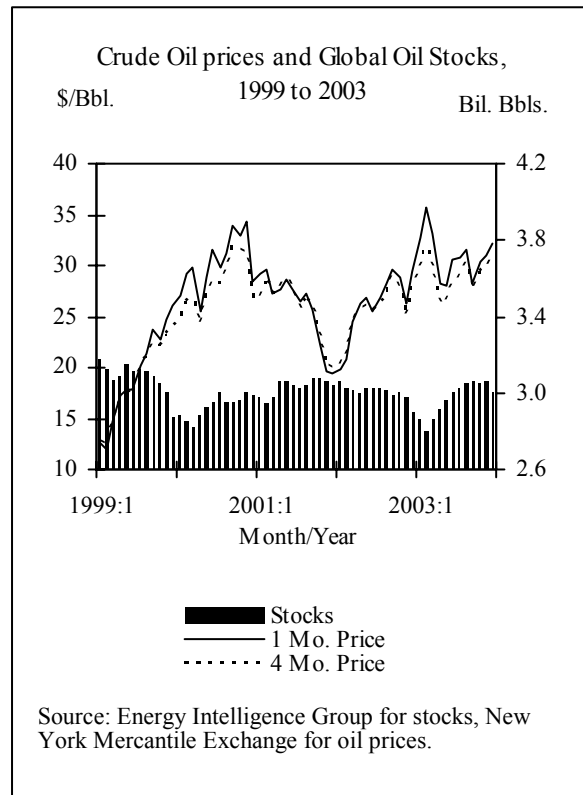


Exhibit 3

earnings, and industry returns.

At the end of World War II, America's shipbuilding industry was by far the largest and most advanced in the world. Since then, as other nations built up or rebuilt their shipbuilding industries and continually modernized them, the construction of commercial oceangoing vessels in the United States has steadily declined. The number of such ships built in the United States

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was 77 in 1975, 21 in 1982, and is 10 per year at present.

Today in the United States, there are 24 private-sector shipyard facilities with the capability of handling vessels over 400 feet in length. This represents a 38 percent reduction from the 39 facilities operating in 1981. Repair yards with dry-dock facilities dropped by 23 percent from 1982 to the present. Most significantly overall, the number of production workers fell from 111,000 in 1982 to 44,700 in 2002. The United States now has less than a 1 percent share of the world's new construction market of commercial vessels of over 1000 gross tons, and lags far behind the world's shipbuilding leaders such as South Korea, Japan, China, Germany, Italy, and Poland.